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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,525	03/03/2006	Masakazu Nagata	YAS-C567	1602

7590 11/15/2006

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EXAMINER

THOMAS, DAVID B

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/533,525

Applicant(s)

NAGATA, MASAKAZU

Examiner

David B. Thomas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/26/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figures 8-12 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g), also see 1st paragraph, page 8, of the specification. Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art, particularly Fig. 8 of the specification, in view of Fujita et al. (6,197,432) and Tanaka et al. (5,298,336), particularly in view of Kusama (US 2003/0150298 A1).

The applicant's admitted prior art tool discloses the structural arrangement of the claimed tool, except for the provision of the washer, or friction member, that is formed

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of, or provided with a film of a sintered copper alloy. Fujita et al. and Tanaka et al. each address the problem of friction and wear that occurs between a fixed part and a rotating element. Fujita et al. teach of a sliding material which is used for bearings, *washers* and other parts of automobiles, industrial machines, agricultural machines and the like, possesses an excellent abrasion resistance, and is useful under severe boundary lubricating conditions. The sliding material comprises a back plate (5) of a steel plate and a sinter bearing layer integrally provided on one surface of the back plate (5). A powder (2) of a hard material is dispersed in an amount of 0.5 to 20% by weight in a matrix (4) of the sinter bearing layer. The matrix (4) comprises 1 to 30% by weight of Pb and 1 to 15% by weight of Sn with the balance consisting of Cu. The powder (2) of a hard material comprises 7.5 to 9.5% by weight of Cr, 27 to 30% by weight of Mo, and 2.0 to 3.0% by weight of Si with the balance consisting of Co. Tanaka et al. similarly teach of a composite sliding material suitably applicable to a bush, a *washer* and the like in an automobile, an industrial machine, an agricultural machine and the like, and particularly to a composite sliding material having excellent seizure resistance property in a boundary lubrication state under severe lubrication conditions, as compared with conventional materials. Kusama discloses that prior art pneumatically operated ratchet wrenches commonly include an arrangement of *washers* including a *friction washer* and one or preferably two Belleville spring washers which combination "serves to pre-load the drive gear axially and prevent oscillation thereof." The primary purpose of this arrangement of washers is to inhibit uncalled-for rotation of the "drive gear", such as retrograde rotation thereof when the tool is set for driving the ratchet wheel in one or the

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other direction, as may be caused by back-drag of the pawl which has been selected for driving the ratchet wheel. Such retrograde rotation has the effect of detracting from the power of the tool. In this regard it may be observed that since in the use of the tool the ratchet wheel may be driven forward in one direction by the one pawl and forward in the other direction by the other pawl it is not possible to use means such as a back-check pawl for positively preventing retrogressive rotation of the ratchet wheel. While this arrangement of washers has been generally satisfactory for the purpose, it has encountered the *problem of relatively short life* due to washer wear and the consequent necessity for shimming up the arrangement or replacing washers. Therefore, recognizing the problem of how to address the need to provide friction, or pre-loading, of the drive gear to prevent oscillation, while at the same time improving, or extending the life of the friction washer thereof, this need having been demonstrated by Kusama, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the tool of the applicant's admitted prior art, by modifying, or rather substituting the friction washer therein, with a sintered copper alloy friction washer, such as that as taught by Fujita et al. and Tanaka et al. Furthermore, the selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). See also *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

Conclusion

4. The remaining prior art made of record but not relied upon is considered


pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David B. Thomas whose telephone number is (571) 272-4497. The examiner can normally be reached on Mon-Fri 8am-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

dbt



David B. Thomas
Primary Examiner
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